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In the claims

Please amend the claims as follows:

1.   (currently amended) A compound of the general formula (I)

$$X(B)_m \qquad\qquad (I)$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

     K   is a bond or is A^1–$(A^2$–$A^3)_k$–sp, wherein

         A^1 is $(CH_2)_t Y(CH_2)_u$, wherein

         Y   is >C=O, >NH, –O–, –S– or a bond,

         t   is an integer from 0 to 6 and

         u   is an integer from 0 to 6,

         <u>$(A^2$–$A^3)$ can be any A^2 and any A^3 in any combination,</u>

         A^2 is –NHCO–, –CONH–, –OCONH– or SCONH–, or –CO–,

         A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or –(CHQ)–, wherein

            r   is an integer from 1 to 6 and

            Q   is a substituted or unsubstituted alkyl or aryl group,

            sp   is a divalent spacer or a bond, and

            k   is an integer from 5 to 100, and

     R   is hydrogen or a ligand suitable for specific bonding to a receptor; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000.

2.   (previously presented) A compound according to claim 1, wherein the molar mass of the fragment $X(K)_m$ is less than 4,000.

3.   (previously presented) A compound according to claim 1, wherein

m   is an integer from 2 to 4, and

X   is CH_{4-m}, NH_{3-m}, N^+H_{4-m}, >P– (when m = 3), >P$^+$< (when m = 4), >B– (when m = 3), a linear atom group C_2H_{6-m}, >CH(CH$_2$)$_z$CH<, >C=C<, >N–N<, >N(CH$_2$)$_z$N< wherein z = 2 - 6, when m = 4), a carbocyclic atom group C_6H_{6-m}, C_6H_{12-m}, or a heterocyclic atom group C_3N_3 (when m = 3), C_4N_2 (when m = 4).

4.   (previously presented) A compound according to claim 1, wherein there are at least 3 K.

5.   (previously presented) A compound according to claim 1, wherein at least two R are not hydrogen.

6.   (previously presented) A compound according to claim 1, wherein at least three R are not hydrogen.

7.   (canceled)

8.   (previously presented) A compound according to claim 1, wherein the ligand R is sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Galα1-3Gal, Gal1α-3(Fucα1-2)Gal, GalNAcα1-3(Fucα1-2)Gal, Neu5Acα2-6GalNAc, SiaLe^A, SiaLe^X, HSO$_3$Le^A, HSO$_3$Le^X, Galα1-3Galβ1-4GlcNAc, Galα1-3Galβ1-4Glc, HSO$_3$GlcAβ1-3Galβ1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, or wherein the ligand R is sialic acid benzyl glycoside, HSO$_3$GlcAβ1-3Gal, HSO$_3$GlcAβ1-3Galβ1-4GlcNAcβ1-3Galβ1-4Glc, GalNAcα, GalNAcα1-

3(Fucα1-2)Galβ1-4GlcNAc, Galα1-3(Fucα1-2)Galβ1-4GlcNAc, HSO_3(Sia)Le^X, HSO_3(Sia)Le^A,

Le^Y, GlcNAcβ1-6(GlcNAcβ1-3)Galβ1-4Glc, GalNAcβ1-4(Neu5Acα2-3)Galβ1-4Glc, mannose-6-phosphate, GalNAcβ1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Galα1-4Galβ1-4Glc, or Galα1-4Galβ1-4GlcNAc.

9.   (previously presented) A compound according to claim 1, wherein

m   is an integer from 2 to 4,

X   is CH_{4-m},

A^1 is CH_2,

A^2 is NHCO,

A^3 is CH_2,

k   is 8,

sp   is $(CH_2)_3CONHCH_2CONHC_6H_4$-4-$CH_2O$- and

R   is Neu5Acα2-6Galβ1-4GlcNAc.

10.   (currently amended) An aggregate of the general formula (II):

$$\{X(B)_m\}_n \qquad (II)$$

wherein X(B)$_m$ may be identical or different and denote a compound of the general formula (I),

$$X(B)_m \qquad (I)$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

K   is a bond or is A^1–(A^2–A^3)$_k$–sp, wherein

A^1 is $(CH_2)_tY(CH_2)_u$, wherein

Y   is >C=O, >NH, –O–, –S– or a bond,

t   is an integer from 0 to 6 and

u   is an integer from 0 to 6,

(A^2–A^3) can be any A^2 and any A^3 in any combination,

A^2 is –NHCO–, –CONH–, –OCONH– or SCONH–, or –CO–,

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A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or $-(CHQ)-$, wherein

    r   is an integer from 1 to 6 and

    Q   is a substituted or unsubstituted alkyl or aryl group,

    sp   is a divalent spacer or a bond, and

    k   is an integer from 5 to 100, and

R   is hydrogen or a ligand suitable for specific bonding to a receptor; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000, and

n   is from 2 to 100,000,

and wherein $X(B)_m$ are non-covalently bonded.

11.   (previously presented) An aggregate according to claim 10 having a leaf-like, linear, cyclic, polycyclic, polyhedral, spherical or dendritic structure.

12.   (currently amended) An aggregate according to claim 10 of two or more different compounds comprising a compound of the general formula (I)

$$X(B)_m \qquad\qquad (I)$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

    K   is a bond or is $A^1-(A^2-A^3)_k-sp$, wherein

        A^1 is $(CH_2)_tY(CH_2)_u$, wherein

        Y   is $>C=O$, $>NH$, $-O-$, $-S-$ or a bond,

        t   is an integer from 0 to 6 and

u   is an integer from 0 to 6,

<u>(A^2-A^3) can be any A^2 and any A^3 in any combination,</u>

A^2 is —NHCO—, —CONH—, —OCONH— or SCONH—, or —CO—,

A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or —(CHQ)—, wherein

     r   is an integer from 1 to 6 and

     Q   is a substituted or unsubstituted alkyl or aryl group,

     sp   is a divalent spacer or a bond, and

     k   is an integer from 5 to 100, and

     R   is hydrogen or a ligand suitable for specific bonding to a receptor; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000.

13.   (canceled)

14.   (previously presented) A method according to claim 27, further comprising adding a concentrated salt solution, changing the pH or the temperature, or adding organic solvents.

15.   (currently amended) A method for changing the structure of an aggregate of the general formula (II)
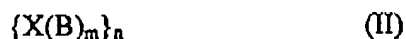
$$\{X(B)_m\}_n \qquad\qquad (II)$$

wherein $X(B)_m$ may be identical or different and denote a compound of the general formula (I),

$$X(B)_m \qquad\qquad (I)$$
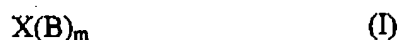
     wherein

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X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

    K   is a bond or is $A^1-(A^2-A^3)_k-sp$, wherein

        A^1 is $(CH_2)_tY(CH_2)_u$, wherein

        Y   is $>C=O$, $>NH$, $-O-$, $-S-$ or a bond,

        t   is an integer from 0 to 6 and

        u   is an integer from 0 to 6,

        (A^2-A^3) can be any A^2 and any A^3 in any combination.

        A^2 is $-NHCO-$, $-CONH-$, $-OCONH-$ or $SCONH-$, or $-CO-$,

        A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or $-(CHQ)-$, wherein

            r   is an integer from 1 to 6 and

            Q   is a substituted or unsubstituted alkyl or aryl group,

            sp   is a divalent spacer or a bond, and

            k   is an integer from 5 to 100, and

    R   is hydrogen or a ligand suitable for specific bonding to a receptor; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000, and

n   is from 2 to 100,000,

and wherein $X(B)_m$ are non-covalently bonded,

further comprising adding a concentrated salt solution, changing the temperature or the pH and/or adding urea, trifluoroethanol or peptides.

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16.   (previously presented) A method according to claim 27 further comprising increasing the specific physiological activities of molecules by incorporating a radical R into a compound of the general formula (I).

17.   (canceled)

18.   (currently amended) A method of treating diseases arising from inflammation, viral and bacterial infections, influenza viruses, selectin-mediated inflammatory processes, tumour metastases, or in the neutralisation of antibodies in autoimmune disorders and transplants; said method comprising administering a compound of the general formula (I)

$$X(B)_m \qquad\qquad (I)$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

K   is a bond or is A^1–$(A^2$–$A^3)_k$–sp, wherein

A^1 is $(CH_2)_t Y(CH_2)_u$, wherein

Y   is >C=O, >NH, –O–, –S– or a bond,

t   is an integer from 0 to 6 and

u   is an integer from 0 to 6,

<u>$(A^2$–$A^3)$ can be any A^2 and any A^3 in any combination,</u>

A^2 is –NHCO–, –CONH–, –OCONH– or SCONH–, or –CO–,

A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or –(CHQ)–, wherein

r   is an integer from 1 to 6 and

Q   is a substituted or unsubstituted alkyl or aryl group,

sp   is a divalent spacer or a bond, and

k   is an integer from 5 to 100, and

R   is hydrogen or a ligand suitable for specific bonding to a receptor; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

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(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000; or administering into an aggregate of the general formula (II)

$$\{X(B)_m\}_n \qquad (II)$$

wherein

$X(B)_m$ may be identical or different and denote a compound of the general formula (I), and

n   is from 2 to 100,000,

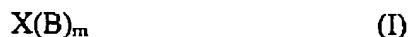and wherein $X(B)_m$ are non-covalently bonded.

19.   (canceled)

20.   (previously presented) A method according to claim 18 further comprising preparing functionalized molecular surfaces.

21.   (canceled)

22.   (canceled)

23.   (currently amended) A compound of the general formula (I),

$$X(B)_m \qquad (I)$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

    K   is a bond or is $A^1-(A^2-A^3)_k-sp$, wherein

        A^1 is $(CH_2)_t Y(CH_2)_u$, wherein

        Y   is >C=O, >NH, –O–, –S– or a bond,

        t   is an integer from 0 to 6 and

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u is an integer from 0 to 6,

(A^2–A^3) can be any A^2 and any A^3 in any combination,

A^2 is –NHCO–, –CONH–, –OCONH– or SCONH–, or –CO–,

A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or –(CHQ)–, wherein

     r is an integer from 1 to 6 and

     Q is a substituted or unsubstituted alkyl or aryl group,

     sp is a divalent spacer or a bond, and

     k is an integer from 5 to 100, and

     R is hydrogen or a ligand suitable for specific bonding to a receptor; and

m is at least 2,

with the proviso that

(1)   X, B and m are so selected that an intermolecular association of the K in liquid phase is possible, especially under aqueous conditions, by the formation of hydrogen bonds, with formation of aggregates, and

(2)   the molar mass of the fragment $X(K)_m$ is less than 20,000, especially less than 4000.

24–26. (canceled)

27.   (currently amended) A method of preparing an aggregate comprising:

preparing a compound of the general formula (II)

$$\{X(B)_m\}_n \hspace{3cm} \text{(II)}$$

wherein

$X(B)_m$ may be identical or different and denote a compound of the general formula (I),

$$X(B)_m \hspace{3cm} \text{(I)}$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

     K   is a bond or is A^1–(A^2–A^3)$_k$–sp, wherein

         A^1 is $(CH_2)_t Y(CH_2)_u$, wherein

         Y   is >C=O, >NH, –O–, –S– or a bond,

t   is an integer from 0 to 6 and

u   is an integer from 0 to 6,

<u>(A^2-A^3) can be any A^2 and any A^3 in any combination,</u>

A^2 is $-NHCO-$, $-CONH-$, $-OCONH-$ or $SCONH-$, or $-CO-$,

A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or $-(CHQ)-$, wherein

   r   is an integer from 1 to 6 and

   Q   is a substituted or unsubstituted alkyl or aryl group,

   sp   is a divalent spacer or a bond, and

   k   is an integer from 5 to 100, and

R   is hydrogen or a ligand suitable for specific bonding to a receptor; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000, and

n   is from 2 to 100,000,

and wherein $X(B)_m$ are non-covalently bonded.

28.   (currently amended) A method of preparing a therapeutic drug comprising:
preparing the compound of the general formula (I)

$$X(B)_m \qquad\qquad (I)$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K–R, wherein

   K   is a bond or is $A^1-(A^2-A^3)_k-sp$, wherein

      A^1 is $(CH_2)_tY(CH_2)_u$, wherein

      Y   is $>C=O$, $>NH$, $-O-$, $-S-$ or a bond,

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t	is an integer from 0 to 6 and
u	is an integer from 0 to 6,

$(A^2\text{--}A^3)$ can be any A^2 and any A^3 in any combination.

A^2	is –NHCO–, –CONH–, –OCONH– or SCONH–, or –CO–,
A^3	is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or –(CHQ)–, wherein

r   is an integer from 1 to 6 and

Q   is a substituted or unsubstituted alkyl or aryl group,

sp   is a divalent spacer or a bond, and

k   is an integer from 5 to 100, and

R   is hydrogen or a ligand suitable for specific bonding to a receptor; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000; or

preparing the compound of the general formula (II):

$$\{X(B)_m\}_n \qquad\qquad (II)$$

wherein

$X(B)_m$ may be identical or different and denote a compound of the general formula (I), and

n   is from 2 to 100,000,

and wherein $X(B)_m$ are non-covalently bonded; and

a pharmaceutically acceptable carrier.

29.   (canceled)